1. Identification of the substance/mixture and of the supplier

1.1 Product identifier

Trade Name: Liquinox

Synonyms:

Product number: Liquinox

1.2 Application of the substance / the mixture: Cleaning material/Detergent

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer: Alconox, Inc.
30 Glenn Street
White Plains, NY 10603
1-914-948-4040

Supplier: Not Applicable

Emergency telephone number:

ChemTel Inc
North America: 1-800-255-3924
International: 01-813-248-0585

2. Hazards identification

2.1 Classification of the substance or mixture:


Hazard-determining components of labeling:

- Alcohol ethoxylate
- Sodium alkylbenzene sulfonate
- Sodium xylenesulphonate
- Lauramine oxide

2.2 Label elements:

- Eye irritation, category 2A.
- Skin irritation, category 2.

Hazard pictograms:

- !

Signal word: Warning

Hazard statements:

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with soap and water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P501 Dispose of contents and container as instructed in Section 13.

Additional information: None.

Hazard description
Safety Data Sheet
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Hazards Not Otherwise Classified (HNOC): None

Information concerning particular hazards for humans and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

3.1 Chemical characterization: None

3.2 Description: None

3.3 Hazardous components (percentages by weight)

<table>
<thead>
<tr>
<th>Identification</th>
<th>Chemical Name</th>
<th>Classification</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 68081-81-2</td>
<td>Sodium Alkylbenzene Sulfonate</td>
<td>Acute Tox. 4; H303 Skin Irrit. 2; H315 Eye Irrit. 2; H319</td>
<td>10-25</td>
</tr>
<tr>
<td>CAS number: 1300-72-7</td>
<td>Sodium Xylenesulphonate</td>
<td>Eye Irrit. 2; H319</td>
<td>2.5-10</td>
</tr>
<tr>
<td>CAS number: 84133-50-6</td>
<td>Alcohol Ethoxylate</td>
<td>Skin Irrit. 2; H315 Eye Dam. 1; H318</td>
<td>2.5-10</td>
</tr>
<tr>
<td>CAS number: 1643-20-5</td>
<td>Lauramine oxide</td>
<td>Skin Irrit. 2; H315 Eye Dam. 1; H318</td>
<td>1-2</td>
</tr>
</tbody>
</table>

3.4 Additional Information: None.

4 First aid measures

4.1 Description of first aid measures

General information: None.

After inhalation:
Maintain an unobstructed airway.
Loosen clothing as necessary and position individual in a comfortable position.

After skin contact:
Wash affected area with soap and water.
Seek medical attention if symptoms develop or persist.

After eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes.
Remove contact lens(es) if able to do so during rinsing.
Seek medical attention if irritation persists or if concerned.

After swallowing:
Rinse mouth thoroughly.
Seek medical attention if irritation, discomfort, or vomiting persists.

4.2 Most important symptoms and effects, both acute and delayed
None
4.3 Indication of any immediate medical attention and special treatment needed:
No additional information.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:
Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

For safety reasons unsuitable extinguishing agents: None

5.2 Special hazards arising from the substance or mixture:
Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Protective equipment:
Wear protective eye wear, gloves and clothing.
Refer to Section 8.

5.4 Additional information:
Avoid inhaling gases, fumes, dust, mist, vapor and aerosols.
Avoid contact with skin, eyes and clothing.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation.
Ensure air handling systems are operational.

6.2 Environmental precautions:
Should not be released into the environment.
Prevent from reaching drains, sewer or waterway.

6.3 Methods and material for containment and cleaning up:
Wear protective eye wear, gloves and clothing.

6.4 Reference to other sections: None

7 Handling and storage

7.1 Precautions for safe handling:
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:
Store closed upright and in a cool dry place, should be 15 - 30 deg C or 60 - 90 deg F.

7.2 Specific end use(s):
No additional information.
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8 Exposure controls/personal protection

8.1 Control parameters :
No applicable occupational exposure limits

8.2 Exposure controls

Appropriate engineering controls:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Respiratory protection:
Not needed under normal conditions.

Protection of skin:
Select glove material impermeable and resistant to the substance.

Eye protection:
Safety goggles or glasses, or appropriate eye protection.

General hygienic measures:
Wash hands before breaks and at the end of work.
Avoid contact with skin, eyes and clothing.

9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance (physical state, color):</th>
<th>Pale yellow liquid</th>
<th>Explosion limit lower:</th>
<th>Not determined or not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosion limit upper:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual pressure at 20°C:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor density:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH-value:</td>
<td>8.5 as is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting/Freezing point:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubilities:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point (closed cup):</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto/Self-ignition temperature:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
<td>Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity:</td>
<td>a. Kinematic: Not determined or not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Dynamic: Not determined or not available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Trade Name: Liquinox
Density at 20°C: Not determined or not available.

10 Stability and reactivity
10.1 Reactivity: None
10.2 Chemical stability: None
10.3 Possibility hazardous reactions: None
10.4 Conditions to avoid: None
10.5 Incompatible materials: None
10.6 Hazardous decomposition products: None

11 Toxicological information
11.1 Information on toxicological effects:

Acute Toxicity:
Oral:

: LD50 >5000 mg per kg Rat, Oral) - product .

Chronic Toxicity: No additional information.

Skin corrosion/irritation:
Alcohol Ethoxylate: May cause mild to moderate skin irritation.
Sodium Alkylbenzene Sulfonate: Causes skin irritation.
Lauramine oxide: Causes skin irritation.

Serious eye damage/irritation:
Sodium Alkylbenzene Sulfonate: Causes serious eye irritation.
Alcohol Ethoxylate: Causes moderate to severe eye irritation and conjunctivitis.
Sodium xylenesulphonate: Rabbit: irritating to eyes.
Lauramine oxide: Causes serious eye damage.

Respiratory or skin sensitization: No additional information.
Carcinogenicity: No additional information.
IARC (International Agency for Research on Cancer): None of the ingredients are listed.
NTP (National Toxicology Program): None of the ingredients are listed.
Germ cell mutagenicity: No additional information.
Reproductive toxicity: No additional information.
STOT-single and repeated exposure: No additional information.
Additional toxicological information: No additional information.

12 Ecological information
12.1 Toxicity:
Sodium Alkylbenzene Sulfonate: Fish, LC50 1.67 mg/l, 96 hours.

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Sodium Alkylbenzene Sulfonate: Aquatic invertebrates, EC50 Daphnia 2.4 mg/l, 48 hours.
Sodium Alkylbenzene Sulfonate: Aquatic Plants, EC50 Algae 29 mg/l, 96 hours.
Lauramine oxide: Fish, LC0 24.3 mg/l, 96h [Killifish (Cyprinodontidae)]
Lauramine oxide: Aquatic invertebrates, (LC50): 3.6 mg/l 96 hours [Daphnia (Daphnia)].
Lauramine oxide: Aquatic plants, EC50 Algae 0.31 mg/l 72 hours [Algae]
Alcohol Ethoxylate: Aquatic invertebrates, (LC50): 4.01 mg/l 48 hours [Daphnia (daphnia)].

12.2 Persistence and degradability: No additional information.
12.3 Bioaccumulative potential: No additional information.
12.4 Mobility in soil: No additional information.
12.5 Results of PBT and vPvB assessment:
   PBT: No additional information.
   vPvB: No additional information.

12.6 Other adverse effects: No additional information.

13 Disposal considerations

13.1 Waste treatment methods (consult local, regional and national authorities for proper disposal)
   Relevant Information:
   It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. (US 40CFR262.11).

14 Transport information

14.1 UN Number:
   ADR, ADN, DOT, IMDG, IATA
   None

14.2 UN Proper shipping name:
   ADR, ADN, DOT, IMDG, IATA
   None

14.3 Transport hazard classes:
   ADR, ADN, DOT, IMDG, IATA
   Class: None
   Label: None
   LTD. QTY: None

US DOT
Limited Quantity Exception: None

Bulk:
   RQ (if applicable): None
   Proper shipping Name: None
   Hazard Class: None
   Packing Group: None
   Marine Pollutant (if applicable): No additional information.
   Comments: None

Non Bulk:
   RQ (if applicable): None
   Proper shipping Name: None
   Hazard Class: None
   Packing Group: None
   Marine Pollutant (if applicable): No additional information.
   Comments: None
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<table>
<thead>
<tr>
<th>Trade Name: Liquinox</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.4 Packing group:</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>ADR, ADN, DOT, IMDG, IATA</td>
</tr>
</tbody>
</table>

| 14.5 Environmental hazards: |
| None |

| 14.6 Special precautions for user: |
| None |
| Danger code (Kemler): |
| None |
| EMS number: |
| None |
| Segregation groups: |
| None |

| 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: |
| Not applicable. |

| 14.8 Transport/Additional information: |
| Transport category: |
| None |
| Tunnel restriction code: |
| None |
| UN "Model Regulation": |
| None |

### 15 Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. North American

| SARA |
| Section 313 (specific toxic chemical listings): |
| None of the ingredients are listed. |
| Section 302 (extremely hazardous substances): |
| None of the ingredients are listed. |

| CERCLA (Comprehensive Environmental Response, Clean up and Liability Act) Reportable Spill Quantity: |
| None of the ingredients are listed. |

| TSCA (Toxic Substances Control Act): |
| Inventory: |
| All ingredients are listed. |
| Rules and Orders: |
| Not applicable. |

| Proposition 65 (California): |
| Chemicals known to cause cancer: |
| None of the ingredients are listed. |
| Chemicals known to cause reproductive toxicity for females: |
| None of the ingredients are listed. |
| Chemicals known to cause reproductive toxicity for males: |
| None of the ingredients are listed. |
| Chemicals known to cause developmental toxicity: |
| None of the ingredients are listed. |

#### Canadian

| Canadian Domestic Substances List (DSL): |
| All ingredients are listed. |

#### EU

| REACH Article 57 (SVHC): |
| None of the ingredients are listed. |

| Germany MAK: |
| Not classified. |
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Australia
Australian Inventory of Chemical Substances (AICS): All ingredients are listed.

China
Inventory of Existing Chemical Substances in China (IECSC): All ingredients are listed.

Japan
Inventory of Existing and New Chemical Substances (ENCS): All ingredients are listed.

Korea
Existing Chemicals List (ECL): All ingredients are listed.

New Zealand
New Zealand Inventory of Chemicals (NZOIC): All ingredients are listed.

Philippines
Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients are listed.

Taiwan
Taiwan Chemical Substance Inventory (TSCI): All ingredients are listed.

16 Other information

Abbreviations and Acronyms: None

Summary of Phrases

Hazard statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements:
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with soap and water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P501 Dispose of contents and container as instructed in Section 13.

Manufacturer Statement:
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

NFPA: 1-0-0
HMIS: 1-0-0